Operating Instructions

Shaker

VIBA POS & VIBA PRO

Keep this manual within immediate reach of the machine

GB - Englisch

Collomix®

Version G 3.2-12

0. Models

The Viba is offered in various models which are all slightly different from a visual and technical perspective. However, general operation and servicing of the appliance is largely identical.

D	**DOOR –** Sliding door for VIBA 25
V	**VARIO -** Variable frequency for VIBA 25
C	**CLAMPING –** second clamping pressure at POS

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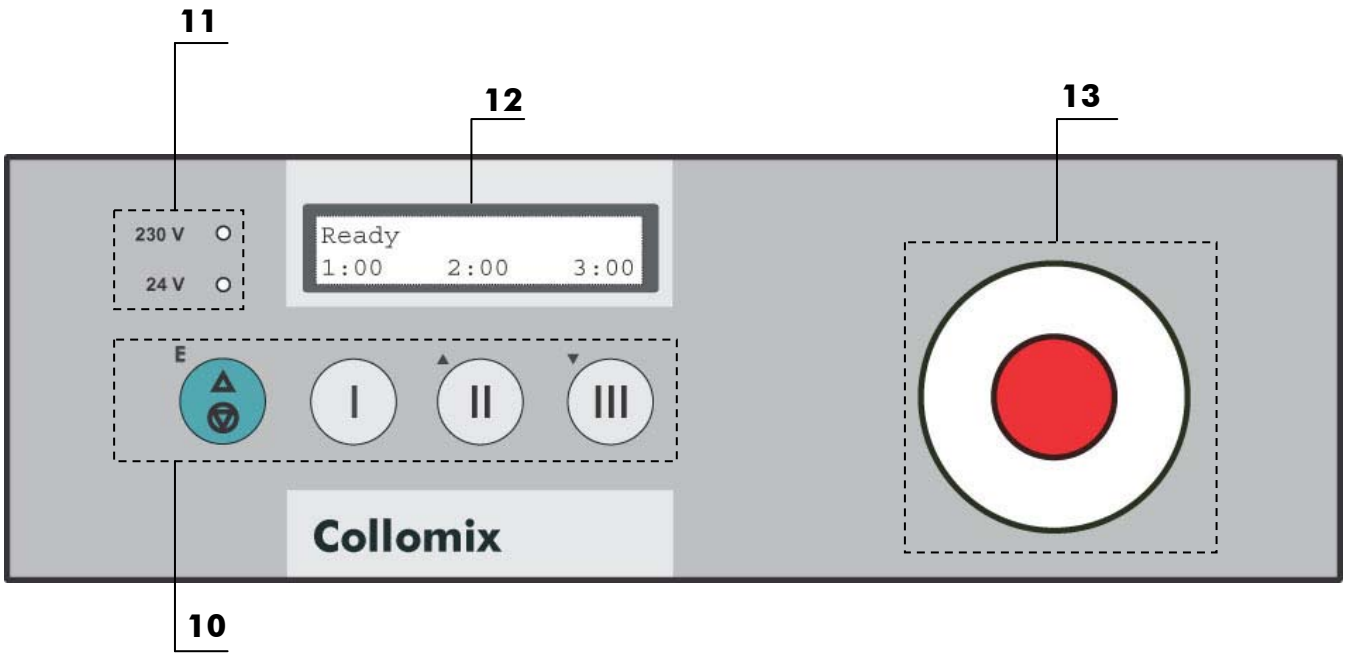
1. Layout drawings

1.1 Machine components

Machine components

1. Mixing table	**6.** Door
2. Manual door release	**7.** Loading shelf
3. Clamping plate	**8.** Transport rollers
4. Main switch	**9.** Rating plate
5. Control panel	

1.2 Control and display components



10. Control buttons

E	**Button E**	•	**OPEN the mixing unit**
		•	**QUIT stand-by mode**
		•	**STOP mixing cycle prematurely**
		•	**ACKNOWLEDGE messages**
I	**Button I**	•	**Mixing cycle I** (works setting 1:00 minute)
II	**Button II**	•	**Mixing cycle II** (works setting 2:00 minutes)
III	**Button III**	•	**Mixing cycle III** (works setting 3:00 minutes)

11. Display for 230V mains voltage and 24V control voltage

12. LCD Display

13. EMERGENCY STOP button

2. General information

The Viba is a stationary shaker for closed, tightly closing, round, rectangular and oval containers made of metal or plastic. It can be used to mix paints, master batches, house paints, industrial paints and plasters as well as other low-viscosity materials.

Practical applications are to be found in the wholesale and retail paint trade, in the paint, lacquer and chemical industries, and many other related sectors. This shaker is particularly ideal as a component in paint dosing systems.

The container is automatically clamped in the machine and is mixed, using an alternating orbital shaking movement, by means of linear forces of inertia.

The required mixing time and the suitability of the container are to be determined before attempting to use the shaker.

This manual is intended for persons who operate the machine.

3. For your safety

Although the VIBA has been developed, manufactured and tested in accordance with fundamental safety requirements, an element of risk is still present!

- Therefore, read this manual before you work with the machine
- Keep this manual within immediate reach of the machine

3.1 Pictograms and symbols used in this manual

The "caution" symbol is used to indicate a situation in which persons are at risk of suffering physical injury. The warning must be heeded at all costs.

The "stop" symbol is used to indicate a situation in which the machine is at risk of being damaged.

The "hazardous electric voltage" symbol is used to indicate live components that may pose a risk to life and limb.

Those parts of the manual that are important for the correct and safe operation of the machine are printed in bold type.

3.2 Proper use

The machine must not be operated in any way other than described in this manual. The term 'improper use' applies in particular to the following:

- Operation with defective or missing parts.
- The bridging or deactivation of any safety devices.
- Operation of the machine in areas with a potentially explosive atmosphere.
- The use and installation of non-original replacement parts.
- Running the machine for too long, which can potentially lead to the mixing container bursting.

The consequences of improper use can be personal injury to the user or third party, as well as material damages to the appliance or mixing material.

3.3 General safety instructions

Observe the electrical regulations in force as well as the additional instructions listed in this manual when you install the machine. Installation and use of the machine for the first time must be carried out by a trained specialist.

The machine is to be used only by persons who are acquainted with the working principles of the machine and also with the safety and accident prevention regulations in force in your country.

Check that the machine is in the proper condition and that all parts are in good working order before beginning with your work. Do not operate the machine with any defective or missing parts.

Any maintenance work or repairs must only be carried out by qualified personnel. Before performing any maintenance work or repairs be sure to disconnect the machine from the power supply by pulling out the power plug. Use only original replacement parts.

Close the machine when not in use and turn off at the main switch. Projecting parts may injure you and others.

3.4 Safety-relevant components

Closed housing

The housing is a stationary safeguard and partition that can only be opened with the use of tools.

Machine door with bolt

The door is an interlocking safeguard and partition with bolt. It is impossible to start the machine when the door is open. The door is not released until after the mixing cycle is ended and the mixing container unclamped.

EMERGENCY STOP function:

With the Emergency Stop function you can

- reliably interrupt the control voltage supply so that the machine is unable to move.
- bring the machine to a halt when it is running.

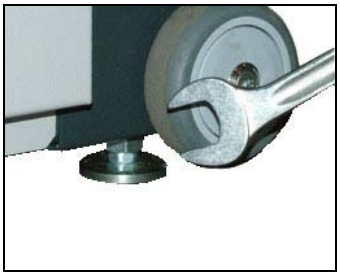
4. Using for the first time

4.1 Unpacking and installation

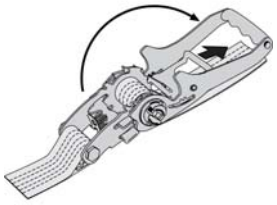
Your Viba is delivered in reusable cardboard packaging on a wooden pallet. Please immediately check the packaging when received, as well as the appliance during unpacking, for any visible signs of external damage. Keep all parts of the original packaging for any necessary return transport.

Lift the machine from the pallet with a suitable hoisting device and place on a firm and level surface. Fit the loading shelf and door handle with the supplied mounting materials.

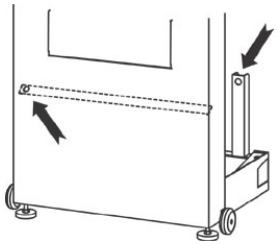
3-footed installation usually renders any fine tuning of the machine unnecessary. However, according to requirements, any severe unevenness of the floor can be compensated with the height-adjustable machine feet.



During transport, the mixing unit is protected from damage by a lashing belt which is stretched tight over the mixing unit. **The lashing belt must be removed before using the machine for the first time:**



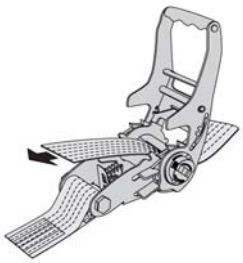
To detach, pull the slider and swivel the lever by approx. 180° until the end stop is reached. **Caution: *The pre-load force will be released with a jolt.***



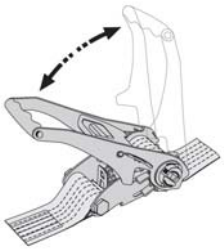
The lashing belt is hooked onto the attachment points in the machine

transport brace

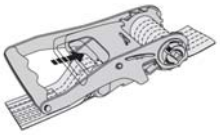
The lashing belt must be re-attached for any transportation of the machine as the otherwise free-swinging mixing unit can lead to the DESTRUCTION of the machine. For this reason, you should keep the lashing belt for later use:



Feed the end of the belt into the buckle and pull through until the belt is tight.



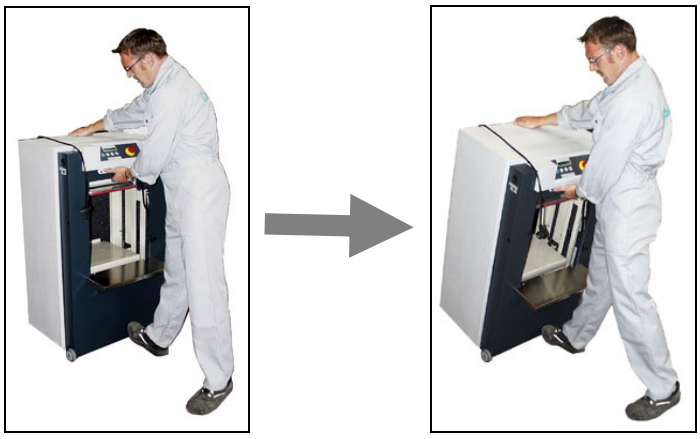
Tighten the belt with the lever until the mixing unit comes to a dead stop below.



Swivel the lever into the closed position, until the slider is locked into place.

4.3 Moving the machine

The Viba has two transport rollers at the front end of the housing. These transport rollers enable ergonomic movement of the machine over short distances.



To be able to grip the machine securely during transport, the door must be open!

4.4 Trial run

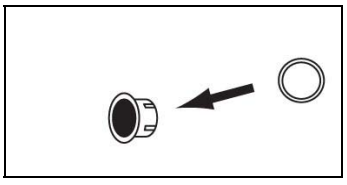
To check that the machine is in good working order, you must carry out a trial run **with an empty mixing container** when you are starting up the machine for the first time or after carrying out maintenance work or repairs.
Do not operate the machine on its shipment pallet or on any other unsuitable surface.

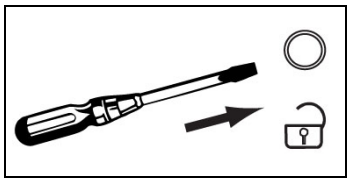
4.5 Manual door release

The machine is fitted with a security bolt which automatically interlocks the door when the mixing cycle is started and when the machine is switched off.

For servicing purposes, however, it is possible to open the door manually:

- Remove the plastic plug cap from the door release (2).
- Press the actuator with a screwdriver or similar device.
- Open the door.





Never operate the machine with any defective or modified safety devices.

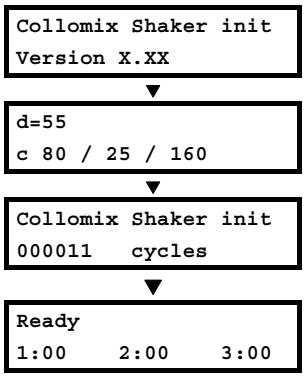
5. Operation

5.1 Switching on the machine

The machine is switched on with the main switch (4).

The word ***READY*** appears in the display after automatic initialization is completed.

Any errors detected during initialization will be indicated in clear text in the display. See description in 6.1 Initialization.



5.2 Load a container

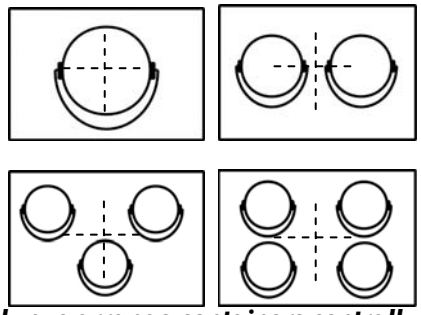
Open the door (if necessary cancel **"STAND-BY" mode** by pressing **button E**).

Press **button E** to move the mixing unit apart in order to match the height of the container.

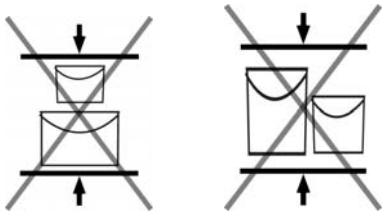
Check that the weight and dimensions of the mixing container are suitable. Do not overload the machine.

Secure the container handle with a rubber band or adhesive tape and place the mixing container on the mixing table in central position.

It is also possible to shake several identical containers simultaneously. In this case, make sure the containers are placed on the mixing table in a symmetrical arrangement.



Always arrange containers centrally



Do not stack containers!

When using larger containers, it is recommended that you place an additional foam filling disk inside the lid. This will reduce the membrane effect of the lid and will minimize operating noise.

Füllscheibe

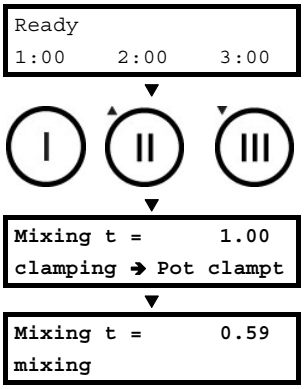
5.3 Starting the mixing cycle

The door has to be closed to start the mixing cycle.

Start the mixing cycle by pressing one of the timer buttons **I, II or III**. The corresponding mixing times are indicated in the LCD display above the buttons.

The mixing container is clamped in the mixing unit and the mixing cycle is started.

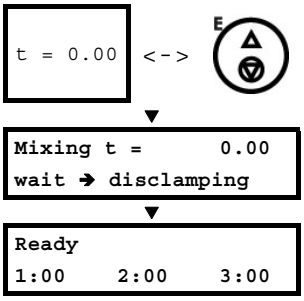
The remaining mixing time is indicated in the display as the mixing cycle progresses.



5.4 Ending the mixing cycle

The mixing cycle is ended automatically **when the selected mixing time is over**. The mixing unit is opened, the door can be opened and the container removed.

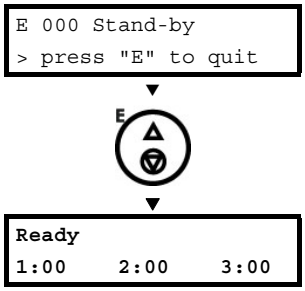
You can end the mixing cycle prematurely **before the selected mixing time is over** by pressing **button E**.



5.5 Stand-by

If approximately 60 minutes pass without the user actuating any function, the Viba will automatically switch to stand-by mode and the door will be locked.

Stand-by mode is cancelled by pressing button E, the door can then be opened.



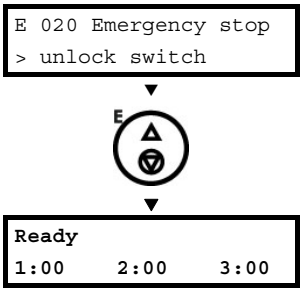
5.6 Triggering the Emergency Stop function

By pressing the Emergency Stop button, the machine can be switched off in a dangerous situation.

After the machine is switched off, the mixing unit will coast to a standstill and remain in this position.
The Emergency Stop button **has to be unlocked again by hand**. This is done by turning the red actuator clockwise.

After unlocking the Emergency Stop button you must cancel the message in the display by pressing **button E**.

The mixing unit is released automatically, the door can be opened and the container removed.



The EMERGENCY STOP button does not disconnect the machine from the mains power supply! Therefore, before performing any maintenance work or repairs always be sure to disconnect the machine from the mains by pulling out the power plug!

6. Trouble-shooting

Using the trouble-shooting tables listed in this chapter, you can check whether you are able to correct the errors yourself or whether you need to call the customer service department.

Before calling the customer service department, please make a note of the machine's serial number, the error code being shown in the display and also the status of the LEDs on the control panel. The machine's serial number can be found on the machine's rating plate (9).

6.1 Initialization

After switching on the machine, a self-test routine is performed. During this initialization, the messages listed below may be displayed. The actions printed on a **gray** background have to be performed by authorized and suitably trained personnel.

LED Display	Display	Remedial actions
230 V ○ 24 V ○	**empty**	• Check the power supply • Check the 230 V fuse • Check the connector / cable of the control pcb
230 V ● 24 V ●	**empty**	• Check the connector / cable of the display pcb • The display is defective • The control pcb is defective
230 V ○ 24 V ○	Ready 1:00 2:20 3:00	• Connector for control buttons in wrong position (buttons do not work)
230 V ● 24 V ○	Door open > Close door	• Check the 24 V fuse • Check the connector / cable of the transformer • The transformer is defective
230 V ● 24 V ●	Door switch fault > Call Service	• Close the door • Check the door interlock system • Check the connector / cable of the door interlock system
230 V ● 24 V ●	Clamp motor fault > Call Service	• Check the clamp motor • Check the connector / cable of the clamp motor • The control pcb is defective
230 V ● 24 V ●	Clamp belt fault > Call Service	• Check the clamp belt • The threaded spindles have jammed • Check the clamp motor / cable – connector
230 V ● 24 V ●	Only high clamp > Call Service	• Check the rotary encoder • Check the connector / cable of the rotary encoder

Please note that all maintenance and servicing work must be left strictly to authorized and suitably trained personnel. This applies in particular to work performed with the housing open.

6.2 Error messages

The following table provides an overview of possible errors and their remedies. The actions printed on a **gray** background have to be performed by authorized and suitably trained personnel.

Fault	Explanation	Machine status	Remedial actions
E000 stand-by mode	Stand-by mode	• Machine has gone into stand-by mode	• Press button E to cancel stand-by mode
E010 door open	The door is open	• The door has been opened	• Close the door
		• The door is closed and the LED for 24V is not on	• Check the fuse for 24 V • Check the 24 V circuit • Check the transformer
		• The door is closed and the LED for 24V is on	• Check the door interlock system • Check the lead/connector to the door interlock
E020 emergency stop	EMERGENCY STOP actuated	• EMERGENCY STOP button has been actuated	• Release the EMERGENCY STOP button
		• EMERGENCY STOP not actuated	• Check the EMERGENCY STOP button switching element • Check the lead/connector to the EMERGENCY STOP
E025 door not locked	Door is not locked	• Door unlocked by hand	• Lock the door by hand
		• Door not unlocked by hand	• Check the door interlock system • Check the lead/connector to the door interlock
E040 max. open	The mixing unit is fully open	• The mixing unit is fully open	• Note that the maximum container height is 400mm
		• The mixing unit is not fully open	• Check whether the threaded spindles move smoothly, clean and lubricate with grease as necessary
E050 defect pot	The container is defective	• The container is defective	• The container is too unstable • Check clamping pressure and adjust as necessary
E130 door switch fault	Door interlock error	The machine does not start	• Check the door interlock system • Check the lead/connector to the door interlock
E140 only high clamp*	Only high clamping pressure is available	The machine only clamps with high clamping pressure	• Check the rotary encoder • Check the operating distance to the rotary encoder • Check the lead/connector to the clamp motor
E150 clamp motor fault	Clamp motor error	Machine does not clamp	• Check the clamp motor • Check the lead/connector to the clamp motor
E150 clamp belt fault	Clamp belt error	Machine does not clamp	• Check clamp belt

* only with VIBA 25 / VIBA 25 VARIO

7. Service and maintenance

Regular inspections, cleaning and maintenance are necessary to ensure that the machine remains in good working condition at all times.

7.1 Inspections

Check that all safety-relevant parts of the machine are in good working order before beginning with your work. Arrange for authorized personnel to replace defective or damaged parts before you work with the machine again.

7.2 Cleaning

If any material escapes from the mixing container when it is inside the machine, remove it immediately. Use a rag or a spatula. Take care not to damage any connecting leads or sensors.

Dirty threaded spindles can be cleaned with a rag or a wire brush. When you have finished cleaning the threaded spindles, lubricate them again with **MOBILUX EP 2**.

Never clean the machine with a high-pressure cleaner or the like. This could wash the lubricating grease out of the ball bearings, leaving them to run dry. Ball bearings which have run dry must be replaced immediately!

7.3 Maintenance intervals

Machine maintenance and repair work must only be carried out by authorized personnel. The extent of the maintenance work is described in the servicing plan drawn up for this machine.

How often you repeat the maintenance work depends on how intensively the machine is operated and also on its average load. The following table provides a guide to the maintenance intervals.

Average load	Number of cycles
12 kg	10000
20 kg	5000
30 kg	1000

The number of cycles completed so far is indicated in the display after the machine is switched on. This provides a guide for when maintenance is next due. When the number of cycles quoted in the table is reached, it is time to arrange for maintenance work to be carried out.

```
Collomix Shaker init
000011    cycles
```

The recommended maintenance work is detailed in Appendix 8.5 Maintenance book . On this page, you should make a note of all the servicing work carried out on the machine. This will provide an overview of maintenance work that has already been completed and work that is still to be carried out.

Please note that all maintenance and servicing work must be left strictly to authorized and suitably trained personnel. This applies in particular to work performed with the housing open.

8. Annex

8.1 Technical data

	VIBA POS	***VIBA PRO***	***VIBA PRO V***
Power supply:	L1, N, PE; 230Volt / 50Hz		
Rated power:	0.9 kW	0.9 kW	1.1 kW
Frequency:	50 Hz		
Fuse:	10 amp		
Speed of mixing unit:	-700 rpm	-700 rpm	- 900 rpm*
Noise emission:	< 65 dB (A) measured in accordance with DIN 45.635		
Max. container weight:	up to 25 kg	up to 40 kg	up to 40 kg
Max. container height:	70 - 300 mm	40 - 400 mm	40 - 400 mm
Max. container footprint: (w x d)	370 x 330 mm	370 x 330 mm	370 x 330 mm
Machine weight:	148 kg	156 kg	158 kg
Dimensions (w x d x h):	710 x 560 x 1205 mm	710 x 560 x 1205 mm	710 x 560 x 1205 mm

* variable, depending on container weight

8.2 Warranty

Within the scope of the conditions of supply, the manufacturer issues a 12 month warranty which applies to single-shift operation and is counted from the date of initial start-up. It covers all defects arising from faulty material or workmanship. Please note that all warranty claims must be accompanied by the original delivery note or initial start-up report.

All essential warranty repair work must only be carried out by adequately trained service engineers or by third parties with express prior authorization from Collomix. The carrying out of unauthorized repairs may render the warranty null and void.

Please return any defective parts or machines carriage-paid to our factory. Collomix reserves the right to decide whether cost-free replacement of parts is applicable. Parts and labor covered by the warranty will be supplied free of charge. The warranty does not cover travel costs, expenses or possible overnight accommodation resulting from warranty repairs carried out off our premises.

Any further responsibility, with particular reference to damage claims, including foregone profit or other material losses on the part of the customer, is expressly excluded.

Warranty and liability claims for personal or material damages are excluded if attributable to one or more of the following causes:

- Incorrect operation of the machine, as defined in the operating instructions
- Failure to observe the instructions in the operating manual with respect to set-up, initial start-up, operation and maintenance of the machine
- Faults or damage caused by excessive accumulations of dirt and/or incorrect cleaning schedules, with particular reference to leaks and damaged containers
- Operation of the machine with defective safety and/or protection devices
- Unauthorized structural modifications to the machine
- Incorrect monitoring of parts subject to wear and consumables
- Unauthorized repairs and/or the fitting of non-original spare parts
- Damage caused by the impact of foreign bodies or force majeure

We reserve the right to make amendments as a result of ongoing advances in the technical field.

8.3 Recycling and disposal

The transport packaging consists of recyclable material. Please dispose of it accordingly.

At the end of the machine's working life, the machine must be professionally disposed and the materials used in its construction must be properly recycled. If you have any questions concerning the disposal of any materials, please contact the manufacturer.

8.4 Declaration of EC conformity

We declare herewith that this product conforms with the following standards and standard-setting documents:

DIN EN ISO 12100-1, DIN EN ISO EN 12100-2, DIN EN ISO 954-1, DIN EN ISO 14121-1, DIN EN 55011, DIN EN 61000-6-2, DIN EN 61000-4-2, DIN EN 61000-4-3, DIN EN 61000-4-4, DIN EN 61000-4-5

in accordance with the provisions of directives 2006/95/EEC, 2004/108/EC, 2006/42/EC.

Technical file at: Collomix Rühr- und Mischgeräte GmbH, Abt. Technische Entwicklung, Daimlerstr. 9, 85080 Gaimersheim, Germany

Gaimersheim, 29.12.2009

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This declaration of conformity will lose its validity if any changes or modifications are made to the machine without the manufacturer's approval.

8.5 Maintenance book

On this page, you should make a note of all the servicing work carried out on the machine. This will provide an overview of maintenance work that has already been completed and work that is still to be carried out.

Date:	***Counter total:*** Cycles	***Name***	***Next maintenance*** at cycles
Cleaning the machine ❑ Clean the inside and the outside of the machine ❑ Remove paint residues from the spindle with a steel brush		***Check* wearing parts** ❑ Drive belt and clamp belt in clamp motor ❑ Crankshaft bearing ❑ Spindle bearing	
Lubricating the machine ❑ Lubricate crankshaft bearing (MOLIKOTE BR2+) ❑ Lubricate the threaded spindles (MOBILUX EP 2)		**Other *work***	

Date:	***Counter total:*** Cycles	***Name***	***Next maintenance*** at cycles
Cleaning the machine ❑ Clean the inside and the outside of the machine ❑ Remove paint residues from the spindle with a steel brush		***Check* wearing parts** ❑ Drive belt and clamp belt in clamp motor ❑ Crankshaft bearing ❑ Spindle bearing	
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